Date: July 31, 2008

Summary:

In accordance with the provisions of the IT and Telecommunications Service Agreement dated January 24, 2006 ("the Agreement") by and between the County of San Diego ("County") and Northrop Grumman Information Technology, Inc. ("Northrop Grumman" or "Contractor") (hereinafter collectively referred to as "the Parties") agreement is reached on the date shown above.

Issue or Problem:

The Parties wish to provide for the inclusion of a labor category and hourly rate for Desktop Engineer.

Resolution:

1.   Section 4, Desktop Services, of the Statement of Work of the Agreement is amended as shown in Attachment 1 to this PRR-028 to provide for a requirement to provide Additional Desktop Engineering Services.

2.   Schedule 16.1, Fees, Exhibit 16.1-4, Applications Services Labor Categories, is amended as shown in Attachment 2 to this PRR-028 to provide for a category entitled "Desktop Engineer."

3.   The pricing for Desktop Engineer is established as shown on Attachment 3 to this PRR.

4.   This PRR shall be effective and shall apply to Desktop Engineering work requested by the County via Work Requests/Integrated Systems Requests as of January 1, 2008.

■ ■

The resolution of the issue or Problem as described in this Problem Resolution Report shall govern the Parties' actions under the Agreement until a formal amendment of the Agreement is implemented in accordance with the terms of the Agreement, at which time this Problem Resolution Report shall be deemed superseded and shall be null and void.

All other terms and conditions of the Agreement remain unchanged and the Parties agree that such terms and conditions set forth in the Agreement shall continue to apply. Unless otherwise indicated, the terms used herein shall have the same meaning as those given in the Agreement.

IN WITNESS WHEREOF, THE Parties hereto, intending to be legally bound, have executed by their authorized representatives and delivered this Problem Resolution Report as of the date first written above.

COUNTY OF SAN DIEGO

NORTHROP GRUMMAN INFORMATION TECHNOLOGY, INC.

By: _Winston McColl_

By: _____

Name: _Winston F. McColl_   Name: Randolph Pabst

Title: _Director_   Title: Director, Contracts

Date: _11/18/2008_   Date: October 21, 2008

DESKTOP SERVICES

4.1. Desktop Services Overview

This section pertains to the Desktop Services Framework. Desktop Services consist of Plan, Build, and Operate services related to computing devices and peripherals (hardware and software) handled directly by End-Users. Contractor shall provide centralized control of all Desktop Services, including Break-Fix and IMARs

Service Framework
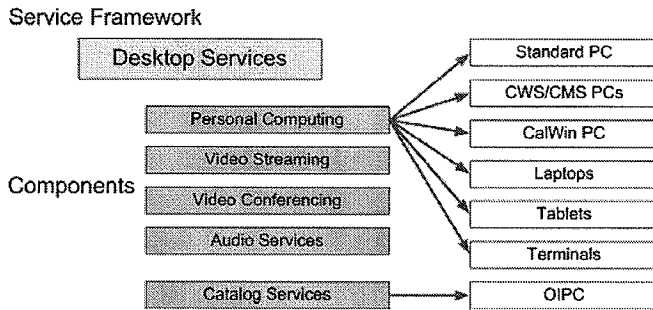
4.2. Desktop Services High Level Requirements

The following are the key high level requirements:

4.2.1. Contractor shall improve service and support levels

4.2.2. Contractor will provide technology assistance and support to the County in planning and standard-setting activities

4.2.3. Contractor shall improve End-User productivity

4.2.4. Contractor shall standardize hardware and software to the extent possible

4.2.5. Contractor shall improve asset management and control

4.2.6. Contractor shall improve total cost of ownership

4.2.7. Contractor shall support County's business initiatives

4.2.8. Contractor shall provide IMAR services for the Desktop Services Framework

4.2.9. Contractor shall publish all Desktop Services asset standards on the County Intranet

4.3.   Desktop Services Requirements, Roles and Responsibilities

The Contractor shall provide IMAR activities for the Desktop Services Framework. All IMAR activities require applicable updates to the Contractor's Asset Management tracking system. IMAR activities are defined as:

4.3.1.   Install

4.3.2.   Contractor shall provide Install services as follows:

- Order and deliver the Desktop Services Framework asset to the End-User workspace.

- Install the Desktop Services Framework asset, including configuration, setup, and network connection

- Perform all diagnostic testing to ensure Desktop Services Framework asset functionality

- Remove any boxes and/or packing materials

4.3.3.   Move

4.3.4.   Contractor shall perform Move services as follows:

- Provide move services from within a Location or from Location to Location, for any Desktop Services Framework asset, which includes disconnecting, moving and reconnecting asset(s)

- Perform all diagnostic testing to ensure Desktop Services asset functionality

4.3.5.   Add

4.3.6.   Contractor shall provide Add services as follows:

- Provide upgrade or add hardware or software to deployed Desktop Services Framework assets

- Provide upgrade or add features to requirements of the Work Request

- Modify current configurations to deployed Desktop Services Framework assets to meet approved standards

4.3.7.   Remove

4.3.8.   Contractor shall perform Remove services as follows:

- Provide Remove services for Desktop Services Framework assets that are being displaced due to Work Request, refresh or Break-Fix activity.

4.3.9.   Contractor shall provide update or upgrade software services as follows:

- Use electronic tools for all networked attached desktop devices to deploy patches, applications, drivers, operating systems and any other upgrade

- For non-network connected devices the Contractor will accomplish required updates and changes by providing the device user with a CD, DVD or an email containing the update or change. The Contractor will provide the device user with written instructions to execute the update or change. Phone assistance will be provided through the Team help desk, which will dispatch onsite support for additional assistance, as required.

4.3.10.   Desktop Services: Plan, Build and Operate Requirements, Roles and Responsibilities

The following table identifies the requirements, roles and responsibilities associated with Plan, Build and Operate services.

Desktop Services: Plan, Build and Operate Requirements, Roles and Responsibilities

Desktop Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
Plan Requirements, Roles and Responsibilities	**Contractor**	**County**
1. Recommend and submit hardware and software standards for Desktop Services assets	X	
2. Review and approve hardware and software standards for Desktop Services assets		X
3. Identify, recommend and submit Desktop Services solutions that best meet County's business needs and expense/service level expectations	X	
4. Review and approve Desktop Services solutions and service levels		X
5. Perform operational planning for Desktop Services capacity and performance purposes	X	
6. Recommend and submit hardware and software deployment/management policies and procedures	X	
7. Review and approve hardware and software deployment/management policies and procedures		X

Desktop Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
8. Recommend and submit hardware and software upgrades to Desktop Services assets	X	
9. Review and approve hardware and software upgrades to Desktop Services assets		X
10. Recommend and submit updates and patches plan to Desktop Services assets	X	
11. Review and approve updates and patches plan to Desktop Services assets		X
12. Update and provide to Contractor a list of County VIPs for use in MASL prioritization criteria		X
13. Recommend and submit MASL prioritization criteria based on the list of County VIPs	X	
14. Review and approve MASL prioritization criteria for County VIPs		X
15. Produce and submit preventive maintenance plans consistent with OEM practices. Plans shall include equipment model and manufacturer, frequency of PM, and specific actions to be taken such as cleaning, lubricating, adjusting, inspecting, running diagnostic tests, and replacing all parts and components defined by OEM as non-user replaceable or consumable necessary to keep the equipment functioning within the OEM specifications	X	
16. Review and approve preventive maintenance plans.		X
17. Produce and submit recommendations for "right sizing" printer to employee ratios	X	
18. Produce and submit tactical printer refresh strategy to determine the actual print need compared to the installed base	X	
Build Requirements, Roles and Responsibilities	**Contractor**	**County**
19. Provide all design and engineering required to deploy and support Desktop Services assets	X	
20. Produce and submit engineering documentation required to deploy and support Desktop Services assets	X	
21. Review and approve all engineering documentation required to deploy and support Desktop Services assets		X
22. Ensure Desktop Services solutions are fully integrated with the Help Desk Services Framework and asset management processes, including, but not limited to: ▪ A shared system and database ▪ Direct electronic interfaces between the Help Desk agents and field service technicians ▪ Integrated support processes involving desktop, data center, and network for remote server and telephone break-fix	X	
23. Provide all test services required to support Desktop Services including providing a test laboratory that will develop and verify desktop images, as well as the support of desktop hardware and components evaluations and demonstrations	X	

Desktop Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
24. Perform desktop software (e.g. applications, patch packages) and hardware functionality and product compatibility testing and development in the test laboratory environment using tools and procedures that are specially designed for this purpose (test to include: unit testing, system integration testing, LAN connectivity testing, load testing, and application interconnectivity testing)	X	
25. Develop and document test scripts	X	
26. Regularly monitor vendor websites and other communications for new application functionality, updates, and new software or hardware	X	
27. Build/Acquire updates and patches for Desktop Services assets	X	
28. Test updates and patches for Desktop Services assets	X	
29. Produce and submit deployment plan for updates and patches for Desktop Service assets	X	
30. Review and approve the deployment plan for updates and patches for Desktop Service assets		X
31. Produce and submit all build documentation	X	
32. Review and approve all build documentation		X
33. Produce and submit to County all test documentation	X	
34. Review and approve all test documentation		X
35. Produce and submit to County all deployment documentation for Desktop Services	X	
36. Review and approve all deployment documentation for Desktop Services		X
37. Manage deployment efforts using formal project management tools, methodologies and standards (e.g., ITIL change and configuration management practices)	X	
38. Conduct deployment reviews and provide results to County	X	
39. Review and approve results of deployment reviews		X
40. Physically connect Desktop Services assets to the applicable wall jack	X	
Operate Requirements, Roles and Responsibilities	**Contractor**	**County**
41. Provide technical support to End-Users for Break-Fix activities	X	
42. Ensure that desktop technicians have the tools necessary to improve problem resolution time	X	
43. Provide priority support for designated County Executives/VIPs	X	
44. Utilize auto discovery asset management tools to ensure most recent version of anti-virus software is installed	X	
45.		
46. Perform routine preventive maintenance according to the County approved preventative maintenance plans	X	
47. Regularly review asset data and failure trends and develop plans to review and proactively repair the equipment	X	
48. Perform predictive maintenance according to the County approved proactive repair plans	X	

Desktop Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
49. Provide and maintain hardware and software documentation on desktops with the core or core + 1 images and provide others online through the online Web access	X	

4.4. Personal Computing Services

4.4.1.   Personal Computing Services Overview

This section pertains to the Personal Computing Services component within the Desktop Services Framework. The Personal Computing Services component applies to all hardware and software needed to maintain and support Personal Computing Services assets. Personal Computing Services consist of activities associated with the Plan, Build and Operate of Standard PCs, CWS/CMS PCs, CalWin PCs, laptops, tablets, terminals and core software.

4.4.2.   Personal Computing Services High Level Requirements

4.4.2.1. Contractor shall provide standardization across the Personal Computing Services component for all hardware and software.

4.4.2.2. Contractor provided Personal Computing Services assets will be subject to refresh cycles as specified below.

4.4.2.3. Contractor shall maintain currency of core software deployed within the Personal Computing Services component.

4.4.3.   Personal Computing Services Environment

4.4.3.1. Scope of the Environment to be Supported

The following sub-sections further describe and scope Personal Computing Services elements to be supported by Contractor and with which Contractor shall comply.

4.4.3.2. Hardware and Software

County Personal Computing Services assets include:

- Standard PCs

Standard PCs hardware standards will be determined yearly and updates to hardware will go into effect at the start of each Contract Year. For the first Contract Year, the standards will be those in effect with the Legacy

Provider as of the date of Cutover for this Service Framework. The process to set Standard PCs hardware standards will be based on recommendations made by the Contractor and approved in writing by the County. Each model selected for a standard should be available from the manufacturer for the entire Contract Year.

Each Contract Year, 25% of the Standard PCs will be refreshed. The refresh will occur over the course of the Contract Year using a straight line methodology (25% of assets evenly refreshed over 12 months). Hardware and core software that meet current Contract Year standards (defined on an annual basis during the preceding Contract Year) will be deployed as part of the refresh process.

- CWS/CMS PCs

The CWS/CMS PCs will comply with County core software standards. There will be no separate hardware standard setting process associated with CWS/CMS PCs. With the CWS/CMS PCs being Retained Assets, there will be no requirement for hardware refresh for this class of Personal Computing Services assets. The CWS/CMS PCs will be fully maintained and supported by the Contractor.

- CalWin PCs

The CalWin PCs will comply with County core software standards. There will be no separate hardware standard setting process associated with CalWin PCs. With the CalWin PCs being Retained Assets, there will be no requirement for hardware refresh for this class of Personal Computing Services assets. The CalWin PCs will be fully maintained and supported by the Contractor.

- Laptops

Laptop hardware standards will be determined yearly and updates to hardware will go into effect at the start of each Contract Year. For the first Contract Year, the standards will be those in effect with the Legacy Provider as of the date of Cutover for this Service Framework. The process to set Laptop hardware standards will be based on recommendations made by the Contractor and approved in writing by the County. Each model selected for a standard should be available from the manufacturer for the entire Contract Year.

Each Contract Year, 1/3 of the Laptop assets will be refreshed. The refresh will occur over the course of the Contract Year using a straight line methodology (1/3 of assets evenly refreshed over 12 months). Hardware and core software that meet current Contract Year standards (defined on an annual basis during the preceding Contract Year) will be deployed as part of refresh process.

- Tablets

Tablet hardware standards will be determined yearly and updates to hardware will go into effect at the start of each Contract Year. For the first Contract Year, the standards will be those in effect with the Legacy Provider as

of the date of Cutover for this Service Framework. The process to set Tablet hardware standards will be based on recommendations made by the Contractor and approved in writing by the County. Each model selected for a standard should be available from the manufacturer for the entire Contract Year.

Each Contract Year, 1/3 of the Tablet assets will be refreshed. The refresh will occur over the course of the Contract Year using a straight line methodology (1/3 of assets evenly refreshed over 12 months). Hardware and core software that meet current Contract Year standards (defined on an annual basis during the preceding Contract Year) will be deployed as part of refresh process.

- Terminals

Terminal hardware standards and refresh are not applicable.

- Core Software

Core software revisions will be reviewed annually by the County at least 60 days prior to start of new Contract Year and updates will go into effect at the start of each Contract Year. For the first Contract Year, the standards will be those in effect with the Legacy Provider as of the date of Cutover for this Service Framework. All assets in the Personal Computing Services Framework will maintain the same version of the core software throughout the given Contract Year. If updates are adopted, these updates will be placed onto all Personal Computing Services assets within a time frame set by County and agreed to by Contractor. At the County's request, Contractor shall recommend updates to the core software standards, for County's review and approval. Criteria for selection of a particular software package version upgrade will include that the software package has been field proven, necessary to the County for uninterrupted service to its customers, and poses no significant application remediation risks. The Contractor shall maintain the Core Software to within one version of the most current release (N-1). Any additions or deletions to the Core Software will be indicated in the Standards and Procedures Manual.

The Core Software currently includes:

- Microsoft Windows XP

- Microsoft Office 2003

- Microsoft Publisher

  – Antivirus software

  – WinZip

  – Adobe Reader 7.x

- Internet Explorer 6.x

- Microsoft Windows Media Player

- Macromedia Shockwave/Flash Player

Attachmate Extra Personal Client

Roxio CD Creator Basic

4.4.4. Personal Computing Services Requirements, Roles and Responsibilities

The following table identifies the requirements, roles and responsibilities associated with Plan, Build and Operate services.

Personal Computing Services: Plan, Build and Operate Requirements, Roles and Responsibilities

Personal Computing Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
Plan Requirements, Roles and Responsibilities	**Contractor**	**County**
1. Recommend and submit Personal Computing assets hardware standards on a yearly basis	X	
2. Review and approve Personal Computing assets hardware standards		X
3. Recommend and submit core software standards for Personal Computing assets	X	
4. Review and approve core software standards for Personal Computing assets		X
5. Recommend and submit core software deployment/management policies and procedures	X	
6. Review and approve core software deployment/management policies and procedures		X
7. Produce and submit yearly Personal Computing asset refresh plan	X	
8. Review and approve yearly Personal Computing asset refresh plan		X
9. Recommend and submit Personal Computing software deployment/management policies and procedures	X	
10. Review and approve Personal Computing software deployment/ management policies and procedures		X
Build Requirements, Roles and Responsibilities	**Contractor**	**County**
11. Develop core software image for Personal Computing assets based on approved standards	X	
12. Test standard core software image for Personal Computing assets prior to deployment based on approved standards	X	
13. Review results of test and approve deployment for the core software image for Personal Computing assets		X

Personal Computing Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
14. Deploy approved Personal Computing core software image.	X	
15. Provide staging services for Personal Computing assets at non-County Locations	X	
16. Deploy and manage desktop and laptop hardware and software (e.g., operating system, personal productivity and office automation software and services)	X	
17. Deploy software (e.g. patches, applications, drivers and operating systems) using a Contractor provided electronic software distribution tool	X	
18. Provide a rapid response team during software deployment for assisting affected End-Users in the event a deployed package adversely affects End-Users or any systems.	X	
19. Deploy, manage, communicate and report activities related to Personal Computing refresh	X	
20. Review and approve reports for Personal Computing refresh		X
21. Develop and provide training related to the implementation of new products and services	X	
22. Engineer the core software image and provide any and all version changes, upgrades, enhancements, and additions to the core software image, to ensure that the core software image will function properly on the desktop and the Applications Portfolio	X	
Operate Requirements, Roles and Responsibilities	**Contractor**	**County**
23. Provide support, including break-fix, for all Personal Computing assets.	X	
24. Provide IMAR services	X	
25. Conduct data, End-User profile (e.g., favorites, bookmarks, MS Outlook profile) and Application migration that is necessary due to any Personal Computing refresh, IMAR or Break-Fix activity.	X	
26. Provide support for Personal Computing assets refresh	X	
27. Purchase, manage, and provide Personal Computing consumables (e.g., floppies, CDs) to the County's employees		X
28. Purchase, manage, and provide Personal Computing consumables (e.g., floppies, CDs) to the employees of Contractor	X	
29. Provide core software updates, OIPC software installation and new software releases for Personal Computing assets	X	
30. Provide each End-User orientation on operational concepts of the new Personal Computing asset at time of deployment	X	
31. Provide and submit End-User tip sheets on such items as log on procedures, networked drives, system usage, core software, data storage and other practices that are essential to daily tasks	X	
32. Review and approve End-User tip sheets prior to deployment		X
33. Continually utilize automated asset management tools to identify unlicensed software on desktops and servers and to pinpoint desktop devices not running the most recent anti-virus software stipulated County standards and policies	X	
34. Provide software license and anti-virus software compliance reports to the County's project manager and work to correct any non-compliance	X	

4.5. Video Streaming Services

4.5.1. Video Streaming Services Overview

This section pertains to the Video Streaming Services component within the Desktop Services Framework. The Video Streaming Services component consists of the process of providing video data or content via a web page to the County Intranet or the external public. Video Streaming Services consist of activities associated with the Plan, Build and Operate of the video streaming service.

4.5.2. Video Streaming Services High Level Requirements

4.5.2.1. Contractor shall provide and maintain video streaming broadcast, at a minimum, of Board of Supervisors meetings and weddings, over the Internet to worldwide audiences and to the County Intranet.

4.5.2.2. Contractor shall deliver and distribute video streaming broadcasts in the most efficient means to deliver high quality video to all End-Users.

4.5.2.3. Contractor shall provide and maintain video streaming capabilities across the County network.

4.5.3. Video Streaming Services Requirements, Roles & Responsibilities

The following table identifies the requirements, roles and responsibilities associated with Plan, Build and Operate services.

Video Streaming Services: Plan, Build and Operate Requirements, Roles and Responsibilities

Video Streaming Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
Operate Requirements, Roles and Responsibilities	Contractor	County
1. Provide support, including Break-Fix, for Video Streaming Services	X	
2. Provide and maintain internet video and audio streaming broadcasts, including broadcasts of Board of Supervisors meetings and weddings by County Clerk	X	
3. Provide broadcast feed of County of San Diego Board of Supervisors meetings to the Cox (or the applicable successor) cable television distribution network	X	

4.6. Video Conferencing Services

4.6.1. Video Conferencing Services Overview

Video Conferencing Services consist of the activities and functions of providing two-way video transmission between different entities. These services include call set-up, call co-ordination, full motion display of events and participants in a bi-directional manner, support for the management of directing the cameras, ranging from fixed position, to sender directed, to receiver directed, to automated sound pickup.

4.6.2. Video Conferencing Services High Level Requirements

4.6.2.1. Video Conferencing hardware and setup, including network connections, will be purchased via the OIPC

4.6.2.2. Contractor shall provide comprehensive Video Conferencing Services including all equipment to County departments.

4.6.2.3. Contractor shall provide point-to-point, meet-me multipoint and scheduled multipoint room configuration Video Conferencing Services.

4.6.3. Video Conferencing Services Environment

4.6.3.1. Scope of the Environment to be Supported

The following sub-sections further describe and scope Video Conferencing Services elements to be supported by Contractor and with which Contractor shall comply.

4.6.3.2. Hardware and Software

The County uses H.320 and H.323 reference based video conferencing devices. Video conferencing devices connect directly to the PBX, PSTN or use private ISDN T1 lines and are configured for point to point or multipoint sessions.

The hardware and setup will be purchased via the OIPC. As a purchased, OIPC item, the hardware will not be subject to refresh.

4.6.4. Video Conferencing Services Requirements, Roles & Responsibilities

The following table identifies the requirements, roles and responsibilities associated with Plan, Build and Operate services.

Video Conferencing Services: Plan, Build and Operate Requirements, Roles and Responsibilities

Video Conferencing Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
Plan Requirements, Roles and Responsibilities	**Contractor**	**County**
1. Produce and submit plans for new, replacement and upgrades to Video Conferencing Services	X	
2. Review and approve plans for new, replacement and upgrades to Video Conferencing Services		X
Build Requirements, Roles and Responsibilities	**Contractor**	**County**
3. Design and implement new, replacement or upgrades to Video Conferencing Services	X	
4. Review and approve design changes and implementation plans to Video Conferencing Services		X
5. Test and deploy approved changes to Video Conferencing Services	X	
6. Develop and provide training related to the implementation of new products and services	X	
Operate Requirements, Roles and Responsibilities	**Contractor**	**County**
7. Provide support, including Break-Fix, for Video Conferencing Services	X	
8. Provide IMAR services	X	
9. Provide and support infrastructure services for point-to-point and multipoint video conferencing	X	
10. Support existing Video Conferencing assets	X	

4.7. Audio/Video Services

4.7.1. Audio/Video Services Overview

Audio/Video Services consist of activities, equipment and services associated with the Plan, Build and Operate functions regarding Audio and Video assets including wiring and cabling. The County will request Audio/Video Services, when needed, via a Work Request.

4.7.2. Audio/Video Services High Level Requirements

4.7.2.1. Provide support for the existing Audio Services and upgrades upon request

4.7.2.2. Provide support for the existing Cable television cable plant and perform upgrades upon request

4.7.3. Audio/Video Services Requirements, Roles & Responsibilities

All requests for service will be handled via a Work Request.

4.8. Catalog Services

4.8.1. Catalog Services Overview

4.8.1.1. Catalog Services consist of activities associated with the Plan, Build and Operate of the Optional Item Pricing Catalog (OIPC)

4.8.1.2. The OIPC contains the hardware and software items that are approved for use within the County Desktop Services environment

4.8.1.3. The OIPC will include hardware such as Blackberries, single or multi-line Telephones, printers, monitors, keyboards and Video Conferencing equipment.

4.8.1.4. The OIPC contains the Desktop Applications Directory (DAD) that has been authorized for use within the County computing environment. DAD packages will be fully maintained by the Contractor which includes, but is not limited to, acquisition of the software, management of software licenses, engineering of the software, deployment of the software, and rights management to the software. The OIPC DAD will be managed by the County and will include adding, deleting or updating approved Applications on the list. Contractor shall update and publish on a monthly basis the OPIC on the County Intranet.

4.8.2. Catalog Services High Level Requirements

4.8.2.1. Maintain currency of items in the OIPC

4.8.2.2. The OIPC will be hosted and made available to County users on a proven table-driven catalog management system

4.8.2.3. Organize the OIPC to facilitate ordering and viewing for End-Users

4.8.2.4. Publish the OIPC on an on-line County Portal, with online help functions, for viewing and ordering

4.8.3. Catalog Services Requirements, Roles and Responsibilities

Attachment 1 to PRR-028

          The following table identifies the requirements, roles and responsibilities associated with Plan, Build and Operate services.

          Catalog Service: Plan, Build and Operate Requirements, Roles and Responsibilities

Catalog Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
Plan Requirements, Roles and Responsibilities	**Contractor**	**County**
1. Define, add, modify and delete hardware and software items in Optional Item Pricing Catalog (OIPC)		X
2. Produce and submit recommendations for updates to hardware and software items in the OIPC	X	
3. Review and approve updates to hardware and software items in the OIPC		X
Build Requirements, Roles and Responsibilities	**Contractor**	**County**
4. Provide all engineering necessary to ensure functionality of all hardware and software items in the OIPC with Personal Computing assets	X	
5. Test all new and updated hardware and software items listed in the OIPC prior to deployment	X	
6. Develop and submit a deployment plan for any multi-End-User OIPC implementations	X	
7. Review and approve deployment plan for any multi-End-User OIPC implementations		X
8. Publish all new and updated items in the OIPC at the conclusion of the engineering activity	X	
Operate Requirements, Roles and Responsibilities	**Contractor**	**County**
9. Authorize items to be included in OIPC		X
10. Add or modify the DAD listed in the OIPC via a Work Request	X	
11. Maintain and support, including Break-Fix, all software and hardware in the OIPC	X	
12. Provide IMAR services for OIPC items	X	
13. Maintain and publish on a monthly basis the OIPC	X	
14. Provide web access and ordering capabilities for the OIPC to all County End-Users	X	
15. Provide on-going OIPC user training	X	
16. Provide End-User orientation on operational concepts of new hardware or software installed via order from the OIPC	X	
17. Produce and submit IT training processes and procedures	X	
18. Review and approve IT training processes and procedures		X
19. Produce and submit recommendations for IT training courses	X	
20. Review and approve IT training courses		X
21. Design and deliver IT training courses as requested by a Work Request	X	
22. Provide IT training courses as requested	X	

Catalog Services: Plan, Build and Operate Requirements, Roles and Responsibilities		
23. Review new manufacturers' product posted offerings, verify the currency of the listed equipment, and maintain the accuracy of the OIPC	X	

4.9. Additional Desktop Engineering Service

4.9.1. Additional Desktop Engineering Services Overview

Without limiting Contractor's obligations under the Desktop Services Framework as set forth in any other Section of the Agreement, the following Desktop Engineering Services may be requested by the County and provided by Contractor.

a. Public kiosk development – This includes the development of unique scripts and policies for public kiosks as approved by the County

b. County approved Work that is performed on Desktop hardware that is not contained in the OIPC and/or is not otherwise provided for in this Agreement.

c. Desktop hardware and/or software pilots approved by the County (i.e. County requested and approved testing of Desktop hardware and/or software the County may be interested in deploying and that Contractor is not otherwise required to test or deploy under any other provision of the Agreement). If the County elects to include software or hardware that was associated with pilot runs, into the Agreement, the charges, as called out in the Agreement (Section 12.2 of Schedule 16.1), applicable to such items will be offset to the extent the tasks associated with such charges were accomplished as part of the pilot run.

EXHIBIT 16.1-4 — APPLICATION AND DESKTOP ENGINEERING SERVICES LABOR CATEGORIES

Exhibit 16.1-4 – Application Services Labor Categories

1. PROGRAM MANAGER

Description: A Program Manager is responsible for the most complex projects. Complex projects are defined:

- Labor Costs greater than $1,000,000 (excluding license or hardware costs) or
- Projects so designated by the GITM

This classification manages both internal and external project teams and interacts with County executives, County department heads, various County staff, and individuals of similar status from County vendors. This classification must have the ability to establish and maintain cooperative working relationships; use interdisciplinary teams effectively in the conduct of the project; speak effectively before large groups; reason logically and creatively and use a variety of analytical and research techniques to solve complex problems; be proficient in the use of cost and schedule tools; analyze situations and propose an effective course of action; analyze data; identify the need for and provide creative thinking related to complex problems, develop and evaluate alternatives; write thorough, credible, well-documented reports; work within tight deadlines. The Program Manager has full responsibility for the project, budget, schedule, project tasks and deliverables and may be the lead to the County vendors.

Experience: This classification must have a minimum of eight (8) years of broad and extensive project experience. At least four (4) years of that experience must have been in a lead capacity.

Education: This classification requires (1) the possession of (i) a baccalaureate or equivalent university degree and a minimum of 4,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes within the last six (6) years, (ii) an associates degree and a minimum of 6,000 hours of project management experience within initiating, planning, executing, controlling, or closing processes, or (iii) a high school diploma or equivalent secondary school credential and a minimum of 7,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes; and (2) PMP certification or contractor equivalent.

Work Products: Examples of work products include: Project Plan, Project Proposal, Statement of Work, Project Status Report, Client Program Review template, CTO review template, and Lesson Learned Document.

2. PROJECT MANAGER

Description: This classification manages both internal and external project teams and interacts with County executives, County department heads, various County staff, and individuals of similar status from a County vendor. This classification must have the ability to establish and maintain cooperative working relationships; use interdisciplinary teams effectively in the conduct of the project; speak effectively before large groups; reason logically and creatively and use a variety of analytical and research techniques to solve

Exhibit 16.1-4 – Application Services Labor Categories

complex problems; be proficient in the use of cost and schedule tools; analyze situations and propose an effective course of action; analyze data; identify the need for and provide creative thinking related to complex problems, develop and evaluate alternatives; write thorough, credible, well-documented reports; work within tight deadlines. The Project Manager has full responsibility for the project, budget, schedule, project tasks and deliverables and may be the lead to the County vendor.

Experience: This classification must have a minimum of five (5) years of broad and extensive project experience. At least two (2) years of that experience must have been in a lead capacity.

Education: This classification requires (1) the possession of (i) a baccalaureate or equivalent university degree and a minimum of 4,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes within the last six (6) years, (ii) an associates degree and a minimum of 6,000 hours of project management experience within initiating, planning, executing, controlling, or closing processes, or (iii) a high school diploma or equivalent secondary school credential and a minimum of 7,500 hours of project management experience within initiating, planning, executing, controlling, or closing processes; and (2) PMP certification or contractors equivalent.

Work Products: Examples of work products include: Project Plan, Project Proposal, Statement of Work, Project Status Report, Client Program Review template, CTO review template, and Lesson Learned Document.

3. SYSTEMS ANALYST

Description: A Systems Analyst performs the elicitation, documentation, and analysis of requirements for the development, installation, implementation, procurement, or support of custom developed systems or third party developed systems. This classification must be able to analyze data and business processes, identify and solve problems, reason logically and draw valid conclusions; apply creative thinking in the design of methods of processing data; establish and maintain effective working relationships with others; communicate effectively verbally and in writing. The Systems Analyst will have general domain understanding of the overall County business and the specific department function.

Specific activities performed will include:

- Participates as an active participant in work groups and work sessions with business and technical representatives;
- Assists clients in articulating and defining their business requirements;
- Provide documentation of the business requirements;
- Utilizes experience in development methodologies, documentation and industry standards to define and develop business requirements and functional specifications; and

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- Perform Business Risk Assessment analysis and support Project Manager in determining Project Risk and Risk Mitigation.

Experience: This classification must have a minimum of six (6) years experience in working on software application development projects. At least three (3) years of that experience must have been associated with application requirements management.

Education: This classification requires the possession of a (1) baccalaureate or equivalent university degree in management information systems, (2) associates degree with two (2) additional years experience in software development, or (3) high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Requirements Document, Project Proposal, Requirements Traceability matrix, and Risk Management Plan.

4. **SENIOR APPLICATION DEVELOPER**

Description: A Senior Application Developer acts in a lead capacity on the most complex applications, and/or on the most complex data processing problems and can work independently.

A Senior Applications Developer has experience in electronic data processing systems study, design, and programming. This classification must have knowledge of electronic computer programming; electronic data processing equipment and its capabilities; principles and techniques of studying work processes for new or revised electronic computer applications; principles of designing methods of processing data; technical report writing; statistical methods. This classification must have the ability to write complex programs and develop detailed program specifications; analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively and prepare effective reports.

Experience: This classification must have a minimum of eight (8) years experience in working on software development projects.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, and Root Cause Analysis Form.

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5. APPLICATION DEVELOPER

Description: An Application Developer acts under general supervision, and can act in a lead capacity on application assignments, and/or on complex data processing problems and can work independently. An Application Programmer has experience in electronic data processing systems study, design, and programming. This classification must have knowledge of electronic computer programming; electronic data processing equipment and its capabilities; principles and techniques of studying work processes for new or revised electronic computer applications; principles of designing methods of processing data; technical report writing; statistical methods. This classification must have the ability to write complex programs and develop detailed program specifications; analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively and prepare effective reports.

Experience: This classification must have a minimum of 3.5 years experience in working on software development projects. At least two (2) years of that experience must be in a single language unless technology precludes it.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, and Root Cause Analysis Form.

6. APPLICATION DEVELOPER—ADVANCED TECHNOLOGY

Description: An Application Developer—Advanced Technology acts under general supervision, and can act in a lead capacity on application assignments, and/or on complex data processing problems and can work independently. This classification must have the minimum technical experience described in Table 2, or the then current version of Table 2 as updated annually by mutual agreement of County and Contractor. An Application Developer—Advanced Technology has experience in electronic data processing systems study, design, and programming. This classification must have knowledge of electronic computer programming; electronic data processing equipment and its capabilities; principles and techniques of studying work processes for new or revised electronic computer applications; principles of designing methods of processing data; technical report writing; statistical methods. This classification must have the ability to write complex programs and develop detailed program specifications; analyze data and situations, reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; apply creative thinking in the design and development of methods of processing data with

Exhibit 16.1-4 – Application Services Labor Categories

electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively and prepare effective reports.

Experience: This classification must have a minimum of five (5) years experience in working on software development projects. At least four (4) years of that experience must be in a single language, development environment, or ERP application functionality identified in Table 2.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, and Root Cause Analysis Form.

Table 2 Technical Experience (minimum 1 technology)

ORACLE DEVELOPER SUITE	PEOPLETOOLS	ERP (I.E., ORACLE OR PEOPLESOFT) APPLICATION FUNCTIONALITY
C#.NET	J2EE/JAVA	Documentum

7. WEB DESIGNER

Description: A Web Designer acts under general supervision, and can act in a lead capacity on application assignments, and/or on complex data processing problems and can work independently. A Web Designer designs and builds web sites using a variety of graphics software applications, techniques, and tools. Designs and develops user interface features, site animation, graphics, and special effects elements. Contributes to the design efforts to enhance the look and feel of the organization's on-line offerings and is considered proficient in graphic design elements and the presentation of content. Designs the website to support the organization's strategies and goals relative to web communications. Requires understanding of web-based technologies and thorough knowledge of HTML, Photoshop, Illustrator, and/or other design related applications.

Experience: This classification must have a minimum of two (2) years experience in working on software development projects. At least one (1) year of that experience must be in web design.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree in management information systems or computer science, (2) an associated degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Unit Test Plan, Computer Programs, Software Configuration Item List, Graphics, and Animation.

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8. APPLICATION ARCHITECT

Description: An Application Architect provides technical direction to projects/tasks and is responsible for end-to-end system design. The Application Architect develops, communicates, maintains, and enforces the overall architecture of the information system-applications, data, and technical infrastructure. The system architect knows what the system pieces are and how they fit together. The Application Architect:

- Has a thorough understanding of business process design techniques and participates in the high-level business process design;
- Is a master of application architecture and leads the application architecture definition;
- Has a thorough understanding of entity modeling and participates actively in high-level entity modeling activities;
- Has a thorough understanding of platform architectures and network architectures (sizes hardware, determines platforms);
- Assess performance, tuning and capacity requirements to determine key technology decisions;
- Is responsible for the interrelated architectures of the computer system, that is, the integrity of design, communications, interfaces between application subsystems, and supporting databases;
- Oversees the activities of the Database Administrator and the Software Configuration Analyst;
- Has primary responsibility for all aspects of Architectural Engineering;
- Thoroughly understands testing and participates in the broader levels of test planning; and
- Ensures effective SCM across applications.

Experience: This classification must have a minimum of seven (7) years experience working on software development projects. At least three (3) years of that experience must be in end-to-end system design, modeling, and tuning.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree or certificate in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Conceptual Architecture Diagram, Interface Design Document, System Architecture Study, Vendor Requirements Questionnaire, and Engineering Documents.

9. DATABASE ADMINISTRATOR

Description: A Database Administrator configures the Database Management System (DBMS) software, installs and configures the application database, defines file organization and indexing methods, and implements security procedures for specific user applications.

Exhibit 16.1-4 – Application Services Labor Categories

The Database Administrator provides technical knowledge/expertise in the use of the DBMSs and provides table structure design, backup/restore/recovery processes and procedures, performance analysis and tuning, datafile sizing, upgrade/patch support, allocating storage, table space allocation, user account management, and may generate SQL scripts against the production/test/development databases to verify data.

Experience: This classification must have a minimum of six (6) years experience working as a Database Administrator.

Education: This classification requires the possession of (1) a baccalaureate or equivalent university degree or certificate in management information systems or computer science, (2) an associates degree with two (2) additional years experience in software development, or (3) a high school diploma with four (4) additional years experience in software development.

Work Products: Examples of work products include: Entity Relationship Diagram, and Data Backup Plan.

10. DESKTOP ENGINEER

Description: A Desktop Engineer develops, tests and implements changes or additions to the Desktop infrastructure used in delivery of the Desktop Services as described in Section 4.9.1 of Schedule 4.3.

Experience: This classification must have a minimum of four (4) years experience working as an Desktop Engineer.

Education: Microsoft Certified Systems Engineer certification.

END OF SCHEDULE

Exhibit 16.1-1 Summary by Resource Unit

Resource Unit	Schedule 4.3 Cross-Reference/Service Framework Component **	Unit of Measure	Pricing	Decomposition (specific cost detail breakouts)	Resource Unit Fee (90% to 110% band)	Baseline Volumes (per Contract Year)	(Resource Unit Fee) x (Baseline Volume)	Bundled Resource Unit	Resource Unit Fee (70% to 80% band)	Resource Unit Fee (80% to 90% band)	Resource Unit Fee (110% to 120% band)	Resource Unit Fee (120% to 130% band)	Measurement Methodology (Specific measurement on last day of month or cumulative use during month)	Depreciation Time Period (in Years)
Help Desk	Help Desk Services--Section 2	Month	Fixed monthly fee per unit	None	$ 208,999.82	12	2,507,998	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Program Manager	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 176.00	7136	1,255,936	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Project Manager	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 141.00	13239	1,866,699	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Systems Analyst	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 110.00	8240	906,400	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Senior Applications Developer	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 104.00	62619	6,512,376	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Applications Developer	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 85.00	73661	6,261,185	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Applications Developer - Adv Technology	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 114.00	27114	3,090,996	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Web Designer	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 108.00	8198	885,384	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Applications Architect	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 156.00	7782	1,213,992	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Database Administrator	Application Services--Section 3 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 133.00	19278	2,563,974	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Desktop Engineer	Desktop Services -- Section 4.9.1 (See also Exhibit 16.1-4)	Hour	Hourly Labor Rate	None	$ 101.00	8240	832,240	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Standard PC	Desktop Services - Personal Computing Services--Section 4.4	Standard PC	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, software license and maintenance, IMARs, Desktop Applications Directory	$ 92.35	98752	9,119,747	B1	$ 116.03	$ 104.95	$ 83.36	78.47	Specific	4
CWS/CMS PC	Desktop Services - Personal Computing Services--Section 4.4	CWS/CMS PC	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, IMARs, Desktop Applications Directory	$ 57.00	13607	775,599	B1	$ 68.43	$ 63.07	$ 52.65	50.29	Specific	N/A
CalWin PC	Desktop Services - Personal Computing Services--Section 4.4	CalWin PC	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, IMARs, Desktop Applications Directory	$ 57.00	25623	1,460,511	B1	$ 68.42	$ 63.07	$ 52.64	50.28	Specific	N/A
Laptops	Desktop Services - Personal Computing Services--Section 4.4	Laptop	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, IMARs, Desktop Applications Directory	$ 130.97	10087	1,321,094	B1	$ 164.48	$ 148.80	$ 118.22	111.31	Specific	3
Tablets	Desktop Services - Personal Computing Services--Section 4.4	Tablet	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, IMARs, Desktop Applications Directory	$ 141.08	600	84,648	B1	$ 177.22	$ 160.30	$ 127.32	119.86	Specific	3
Terminals	Desktop Services - Personal Computing Services--Section 4.4	Terminal	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, license and maintenance, IMARs	$ 41.51	3403	141,259	B1	$ 46.99	$ 44.41	$ 39.42	38.28	Specific	N/A
Video Streaming	Desktop Services - Video Streaming Services--Section 4.5	Month	Fixed Fee	None (Monthly Rate)	$ 14,355.28	12	172,263	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Video Technician Services	Desktop Services - Audio / Video Services--Section 4.7	Hour	Hourly Labor Rate	None	$ 110.00	500	55,000	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Audio Technician Services	Desktop Services - Audio / Video Services--Section 4.7	Hour	Hourly Labor Rate	None	$ 110.00	500	55,000	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
End-User Data Jack	Network Services - Data Network Services--Section 5.4, Data Center Services - Infrastructure Services--Section 6.6, Network Services - Security Services--Section 5.7	Active Data Jack	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, software amortization, network management, network capacity and performance monitoring, site to site connectivity, user to network connectivity, network engineering, Internet access and network refresh and maintenance, protection from unauthorized devices, firewall services, intrusion detection, security monitoring, security architecture, data protection, and prevention of malicious code from entering the Network, IMARs	$ 85.26	157155	13,399,035	N/A	$ 95.79	$ 91.65	$ 84.41	83.55	Specific	5
Remote Access	Network Services - Remote Access Services--Section 5.5, Network Services - Security Services--Section 5.7	Active Account	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, software amortization, third-party connections, VPN, Remote Access accounts, and dial-up access and maintenance, IMARs	$ 11.73	28872	338,765	N/A	N/A	N/A	N/A	N/A	Specific	N/A
3rd-Party Network Access - Category 1	Network Services - 3rd-Party Network Access Services--Section 5.9	Networks	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, software amortization, third-party connections, IMARs	$ 929.12	24	22,299	N/A	N/A	N/A	N/A	N/A	Specific	5
3rd-Party Network Access - Category 2	Network Services - 3rd-Party Network Access Services--Section 5.9	Networks	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, software amortization, third-party connections, IMARs	$ 292.82	144	42,166	N/A	N/A	N/A	N/A	N/A	Specific	5
3rd-Party Network Access - Category 3	Network Services - 3rd-Party Network Access Services--Section 5.9	Networks	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, software amortization, third-party connections, IMARs	$ 356.45	96	34,220	N/A	N/A	N/A	N/A	N/A	Specific	5

Exhibit 16.1-1 -Summary by Resource Unit

Resource Unit	Schedule 4.3 Cross-Reference/Service Framework Component**	Unit of Measure	Pricing	Decomposition (specific cost detail breakouts)	Resource Unit Fee (90% to 110% band)	Baseline Volumes (per Contract Year)	(Resource Unit Fee) x (Baseline Volume)	Bundled Resource Unit	Resource Unit Fee (70% to 80% band)	Resource Unit Fee (80% to 90% band)	Resource Unit Fee (110% to 120% band)	Resource Unit Fee (120% to 130% band)	Measurement Methodology (Specific measurement on last day of month or cumulative use during month)	Depreciation Time Period (in Years)
Voice Jack - Single-Line	Network Services - Voice Services-- Section 5.6	Active Voice Jack for Single-Line Voice	Fixed monthly fee per unit	PBX/Centrex equipment lease/depreciation and maintenance, software amortization, circuits, integrated voice response, auto attendance, automated call distribution, 4-1-1 operator services, and maintenance, trunk lines, IMARs	$ 43.81	95133	4,167,777	B2	$ 48.19	$ 47.10	$ 43.37	$ 42.93	Specific	5
Voice Jack - Multi-Line	Network Services - Voice Services- Section 5.6	Active Voice Jack for Multi-Line Voice	Fixed monthly fee per unit	PBX/Centrex equipment lease/depreciation and maintenance, software amortization, circuits, integrated voice response, auto attendance, automated call distribution, 4-1-1 operator services, and maintenance, trunk lines, IMARs	$ 45.47	153404	6,975,280	B2	$ 50.02	$ 48.88	$ 45.02	$ 44.56	Specific	5
On-Net Calls	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ -			N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Off-Net Local Calls	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.000202	3178742820	641,046	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Off-Net Toll Calls	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.000550	417760140	229,768	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Off-Net Long Distance Calls (California)	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.000605	199785720	120,870	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Off-Net Long Distance Calls (US)	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.000550	83818140	46,100	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
International Calls	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.002383	16203960	38,619	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Toll Free 800 Service (San Diego & Imperial)	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.000642	715941900	459,396	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Toll Free 800 Service (California)	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.000825	29207940	24,097	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Toll Free 800 Service (US)	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.000550	26493840	14,572	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Casual Use Calling (Collect calls, person to person, remote, operator assistance, 3rd party, dial 1, dedicated).	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.020167	13782240	277,942	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Conference Bridge Calls	Network Services - Voice Services-- Section 5.6	Seconds	Fixed monthly fee per unit	None	$ 0.002933	16382400	48,055	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Directory Assistance	Network Services - Voice Services-- Section 5.6	Calls	Fixed monthly fee per unit	None	$ 0.506000	12844	6,499	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Pay Phones	Network Services - Voice Services-- Section 5.6	Phones	Fixed monthly fee per unit	None	$ 55.00	240	13,200	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Voice Mail	Network Services - Voice Services-- Section 5.6	Active Voice Mail Accounts	Fixed monthly fee per unit	None	$ 3.52	256217	901,884	N/A	N/A	N/A	N/A	N/A	Specific	5
Analog Jack	Network Services - Voice Services-- Section 5.6	Active Analog Jack	Fixed monthly fee per unit	Hardware lease/depreciation and maintenance, software amortization and maintenance, trunk lines, IMARs	$ 40.58	40097	1,627,136	B2	$ 44.64	$ 43.62	$ 40.17	$ 39.77	Specific	5
Network Wireless Access Point	Network Services - Wireless Access Services--Section 5.10	WAP	Fixed monthly fee per unit	Hardware, hardware maintenance, software, software maintenance, IMARs	$ 1,006.38	60	60,383	N/A	N/A	N/A	N/A	N/A	Specific	7
Site Type I - Installation	Network Services-New Site Installation--Section 5.8	Site Type I Installation	Fixed Fee	None	$ 687,500.00	1	687,500	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Site Type II - Installation	Network Services-New Site Installation--Section 5.8	Site Type II Installation	Fixed Fee	None	$ 343,750.00	1	343,750	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Site Type III - Installation	Network Services-New Site Installation--Section 5.8	Site Type III Installation	Fixed Fee	None	$ 116,875.00	1	116,875	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Site Type IV - Installation	Network Services-New Site Installation--Section 5.8	Site Type IV Installation	Fixed Fee	None	$ 3,437.50	1	3,438	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Site Type V - Installation	Network Services-New Site Installation--Section 5.8	Site Type V Installation	Fixed Fee	None	$ 1,375.00	1	1,375	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Site Type VI - Installation	Network Services-New Site Installation--Section 5.8	Site Type VI Installation	Fixed Fee	None	$ 2,750.00	1	2,750	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
Mainframe	Data Center Services -Application Servers--Section 6.5	CPU Hour***	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 140.48	12614	1,772,027	N/A	$ 147.48	$ 143.59	$ 138.24	136.31	Cumulative	7
DEC VAX	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 2,784.17	84	233,870	N/A	N/A	N/A	N/A	N/A	Specific	N/A
VMS Servers - Large	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 4,316.63	24	103,599	N/A	N/A	N/A	N/A	N/A	Specific	5
VMS Servers - Medium	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 3,334.95	12	40,019	N/A	N/A	N/A	N/A	N/A	Specific	5
VMS Servers - Small	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 1,984.49	12	23,814	N/A	N/A	N/A	N/A	N/A	Specific	5
AS/400	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 4,400.22	12	52,803	N/A	N/A	N/A	N/A	N/A	Specific	N/A

Exhibit 16.1-1 Summary by Resource Unit

Resource Unit	Schedule 4.3 Cross-Reference/Service Framework Component **	Unit of Measure	Pricing	Decomposition (specific cost detail breakouts)	Resource Unit Fee (90% to 110% band)	Baseline Volumes (per Contract Year)	(Resource Unit Fee) x (Baseline Volume)	Bundled Resource Unit	Resource Unit Fee (70% to 80% band)	Resource Unit Fee (80% to 90% band)	Resource Unit Fee (110% to 120% band)	Resource Unit Fee (120% to 130% band)	Measurement Methodology (Specific measurement on last day of month or cumulative use during month)	Depreciation Time Period (in Years)
Wintel Application Servers - Large	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 2,251.23	288	648,356	N/A	N/A	N/A	N/A	N/A	Specific	5
Wintel Application Servers - Medium	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 1,609.98	564	908,028	N/A	N/A	N/A	N/A	N/A	Specific	5
Wintel Application Servers - Small	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 1,288.94	1056	1,361,120	N/A	N/A	N/A	N/A	N/A	Specific	5
Wintel Application Preprod/Test Servers - Large	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 1,685.13	60	101,108	N/A	N/A	N/A	N/A	N/A	Specific	5
Wintel Application Preprod/Test Servers - Med	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 1,297.60	204	264,711	N/A	N/A	N/A	N/A	N/A	Specific	5
Wintel Application Preprod/Test Servers - Small	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 1,018.12	600	610,870	N/A	N/A	N/A	N/A	N/A	Specific	5
UNIX Servers - Large	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 5,286.76	72	380,646	N/A	N/A	N/A	N/A	N/A	Specific	5
UNIX Servers - Medium	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 3,295.86	120	395,503	N/A	N/A	N/A	N/A	N/A	Specific	5
UNIX Servers - Small	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 2,154.96	168	362,034	N/A	N/A	N/A	N/A	N/A	Specific	5
UNIX Servers Preprod/Test - Large	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 5,988.72	12	71,865	N/A	N/A	N/A	N/A	N/A	Specific	5
UNIX Servers Preprod/Test - Medium	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 2,363.81	168	397,121	N/A	N/A	N/A	N/A	N/A	Specific	5
UNIX Servers Preprod/Test - Small	Data Center Services -Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance. Need processing and storage components broken out separately.	$ 1,341.14	96	128,750	N/A	N/A	N/A	N/A	N/A	Specific	5
E10K	Data Center Services - Application Servers--Section 6.5	Server	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 22,059.56	12	264,715	N/A	N/A	N/A	N/A	N/A	Specific	5
E-Mail Services	Data Center Services - E-Mail Services-Section 6.7	Account	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 10.92	185832	2,029,285	N/A	$ 10.92	$ 10.92	$ 10.92	$ 10.92	Specific	5
DASD (Mainframe) Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabytes	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 7.12	13286	94,556	N/A	N/A	N/A	N/A	N/A	Specific	7
DASD (DEC-VAX) Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabytes	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 0.264	17134	4,523	N/A	N/A	N/A	N/A	N/A	Specific	N/A
DASD (AS/400) Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabytes	Fixed monthly fee per unit	Hardware depreciation/lease, operating system license, hardware maintenance, software maintenance	$ 0.737	1920	1,415	N/A	N/A	N/A	N/A	N/A	Specific	N/A
DASD (WINTEL) Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabytes	Fixed monthly fee per unit	Hardware, operating system license, hardware maintenance, software maintenance	$ 4.54	144000	654,192	N/A	N/A	N/A	N/A	N/A	Specific	N/A
DASD (Unix) Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabytes	Fixed monthly fee per unit	Hardware, operating system license, hardware maintenance, software maintenance	$ 5.20	192000	998,976	N/A	N/A	N/A	N/A	N/A	Specific	N/A
DASD (VMS Server) Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabytes	Fixed monthly fee per unit	Hardware, operating system license, hardware maintenance, software maintenance	$ 4.53	10866	49,245	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Installed Level 1 Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabyte	Fixed monthly fee per unit	Hardware, operating system license, hardware maintenance, software maintenance	$ 4.38	240000	1,051,200		N/A	N/A	N/A	N/A	Specific	7
Installed Level 2 Storage	Data Center Services - Storage Services--Section 6.8	Installed Gigabyte	Fixed monthly fee per unit	Hardware, operating system license, hardware maintenance, software maintenance	$ 4.08	480000	1,958,400		N/A	N/A	N/A	N/A	Specific	7

Exhibit 16.1-1 - Summary by Resource Unit

Resource Unit	Schedule 4.3 Cross-Reference/Service Framework Component **	Unit of Measure	Pricing	Decomposition (specific cost detail breakout)	Resource Unit Fee (90% to 110% band)	Baseline Volumes (per Contract Year)	(Resource Unit Fee) x (Baseline Volume)	Bundled Resource Unit	Resource Unit Fee (70% to 80% band)	Resource Unit Fee (80% to 90% band)	Resource Unit Fee (110% to 120% band)	Resource Unit Fee (120% to 130% band)	Measurement Methodology (Specific measurement on last day of month or cumulative use during month)	Depreciation Time Period (in Years)
Print per 1,000 images (Paper)	Data Center Services - Managed Print Services--Section 6.9	1,000 images	Fixed monthly fee per unit	None	$ 42.42	33826	1,434,764	N/A	$ 42.42	$ 42.42	$ 42.42	$ 42.42	Cumulative	N/A
Microfiche Originals	Data Center Services - Managed Print Services--Section 6.9	Copy	Fixed monthly fee per unit	None	$ 0.803	195197	156,743	N/A	$ 0.803	$ 0.803	$ 0.803	$ 0.803	Cumulative	N/A
Microfiche Duplicates	Data Center Services - Managed Print Services--Section 6.9	Copy	Fixed monthly fee per unit	None	$ 0.077	491739	37,864	N/A	$ 0.077	$ 0.077	$ 0.077	$ 0.077	Cumulative	N/A
Security Management	Cross Functional Services - Security Management Services--Section 7.3	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 41,421.14	12	497,054	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Billing Management	Cross Functional Services - Billing Management Services--Section 7.4	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 49,216.11	12	590,593	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Asset Management	Cross Functional Services - Asset Management Services--Section 7.5	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 94,047.00	12	1,128,564	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Contract Management	Cross Functional Services - Contract Management Services--Section 7.6	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 146,702.12	12	1,760,425	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Reporting Services	Cross Functional Services - Reporting Services--Section 7.7	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 49,130.63	12	589,568	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Disaster Recovery	Cross Functional Services - Disaster Recovery Services--Section 7.8	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 19,498.18	12	233,978	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Workflow Services	Cross Functional Services - Workflow Services--Section 7.9	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 11,752.43	12	141,029	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Capacity and Performance Management	Cross Functional Services - Capacity and Performance Management Services--Section 7.10	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 30,880.67	12	370,568	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Configuration Management	Cross Functional Services - Configuration Management Services--Section 7.11	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 18,481.33	12	221,776	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Account Management	Cross Functional Services - Account Management Services--Section 7.12	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 26,215.38	12	314,585	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Project Management	Cross Functional Services - Project Management Services--Section 7.13	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 81,736.23	12	980,835	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Quality Assurance	Cross Functional Services - Quality Assurance Services--Section 7.14	Month	Fixed monthly fee per unit	By Service Framework - Help Desk Services, Application Services, Desktop Services, Network Services, Data Center Services	$ 46,182.78	12	554,193	N/A	N/A	N/A	N/A	N/A	Specific	N/A
Group Solutions Executive Services				None (annual rate, billed monthly at $110,000, subject to annual escalation each year after Contract Year 3)	$ 1,320,000.00	1	1,320,000	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
MASL Special Requirements - Registrar of Vote	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Month	Fixed monthly fee per unit	None	$ 13,403.27	10	134,033	N/A	N/A	N/A	N/A	N/A	Specific	N/A
MASL Special Requirements - HHSA	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Month	Fixed monthly fee per unit	None	$ 880.00	12	10,560	N/A	N/A	N/A	N/A	N/A	Specific	N/A
MASL Special Requirements - OES	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Day	Fixed daily fee per unit	None	$ 502.10	15	7,531	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
MASL Special Requirements - Tax Collector	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Day	Fixed daily fee per unit	None	$ 479.97	90	43,197	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
MASL Special Requirements - Public Administ	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Day	Fixed daily fee per unit	None	$ 496.57	8	3,973	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
MASL Special Requirements - Assessor	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Month	Fixed monthly fee per unit	None	$ 2,000.00	4	8,000	N/A	N/A	N/A	N/A	N/A	Cumulative	N/A
MASL Special Requirements - Treasurer	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Month	Fixed monthly fee per unit	None	$ 300.00	12	3,600	N/A	N/A	N/A	N/A	N/A	Specific	N/A
MASL Special Requirements - Public Works	Minimum Acceptable Service Levels - Special Requirements--Section 8.5	Month	Fixed monthly fee per unit	None	$ 675.00	12	8,100	N/A	N/A	N/A	N/A	N/A	Specific	N/A

Exhibit 16.1-1 Summary by Resource Unit

Resource Unit	Schedule 4.3 Cross-Reference/Service Framework Component **	Unit of Measure	Pricing	Decomposition (specific cost detail breakouts)	Resource Unit Fee (90% to 110% band)	Baseline Volumes (per Contract Year)	(Resource Unit Fee) x (Baseline Volume)	Bundled Resource Unit	Resource Unit Fee (70% to 80% band)	Resource Unit Fee (80% to 90% band)	Resource Unit Fee (110% to 120% band)	Resource Unit Fee (120% band)	Measurement Methodology (Specific measurement on last day of month or cumulative use during month)	Depreciation (Time Period (in Years))
Transition Services--Help Desk Services	Cross Functional Services - Transition Services--Section 7.15	Milestone	Fixed fee per unit*	Hardware, Software, Labor	$ 1,100,797.08	1	1,100,797	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Transition Services--Applications Services	Cross Functional Services - Transition Services--Section 7.15	Milestone	Fixed fee per unit*	Hardware, Software, Labor	$ 2,799,175.04	1	2,799,175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Transition Services--Desktop Services	Cross Functional Services - Transition Services--Section 7.15	Milestone	Fixed fee per unit*	Hardware, Software, Labor	$ 1,209,194.86	1	1,209,195	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Transition Services--Network Services	Cross Functional Services - Transition Services--Section 7.15	Milestone	Fixed fee per unit*	Hardware, Software, Labor	$ 905,641.03	1	905,641	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Transition Services--Data Center	Cross Functional Services - Transition Services--Section 7.15	Milestone	Fixed fee per unit*	Hardware, Software, Labor	$ 4,360,829.48	1	4,360,829	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added Services			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Note: The Resource Unit Fees for Transition shall be paid in accordance with Section 4 (Transition Services) of Schedule 16.1 (Fees).

**Note: Column B (Schedule 4.3 Reference/Component) includes the Section reference for the specific requirements for this particular Resource Unit but it still includes all general requirements applicable to such Resource Unit in the higher levels of the obligations hierarchy as described in Section 1.3.8 of Schedule 4.3. For example, the Resource Unit for Standard PC includes not only the responsibilities as stated in Section 4.4 of the Desktop Services Section of Schedule 4.3, but also the responsibilities in Sections 4.1 through 4.3 of the Desktop Services Section, as well as the responsibilities and requirements in Section 1 of Schedule 4.3.

***Note: The mainframe resource unit volumes are based on the R24 CPUs

End of Exhibit